

CLAIMS

1. Bicycle wheel hub, having a tubular body made of a plurality of layers of structural fibre fabric 5 incorporated in a plastic material matrix, said layers including one or more fabric strips wrapped around at least one axially limited portion of the hub body as well as a plurality of fabric plies extending along the hub axis.

10

2. Bicycle wheel hub according to claim 1, wherein at least some of said strips and at least some of said plies are alternated to each other.

15

3. Bicycle wheel hub according to claim 1, wherein at least one of said wrapped strips is provided at one end portion of the hub.

20

4. Bicycle wheel hub according to claim 1, wherein said wrapped strips are provided at both ends of the hub.

25

5. Bicycle wheel hub according to claim 1, wherein at least one of said wrapped strips is provided at an intermediate portion of said core.

6. Bicycle wheel hub according to claim 1, wherein at least some of said strips have cuttings on at least one lateral edge thereof.

30

7. Bicycle wheel hub according to claim 1, wherein at least some of said strips have extensions on at least one lateral edge thereof.

35

8. Bicycle wheel hub according to claim 1,

wherein at least some of said strips have a combination of cuttings and extensions on at least one lateral edge thereof.

5 9. Bicycle wheel hub according to claim 6, wherein said cuttings are triangular.

10 10. Bicycle wheel hub according to claim 6, wherein said cuttings are rectilinear.

15 11. Bicycle wheel hub according to claim 1, wherein at least some of said plies extend for the entire length of the hub.

15 12. Bicycle wheel hub according to claim 1, wherein at least some of said plies cover an angle of less than 360° in the circumferential direction.

20 13. Bicycle wheel hub according to claim 12, wherein said plies are provided on different sides of the hub body for forming a complete layer of the body.

25 14. Bicycle wheel hub according to claim 13, wherein the plies are provided in pairs on diametrically opposite sides of the hub body.

15 15. Bicycle wheel hub according to claim 13, wherein different pairs of plies are provided which are angularly spaced relative to each other.

30 16. Bicycle wheel hub according to claim 15, wherein two pairs of diametrically opposite plies are provided spaced by 90° relative to each other.

35 17. Bicycle wheel hub according to claim 1,

wherein it has a central cylindrical section and two wider bell-shaped end sections, the thickness of the hub tubular body increasing progressively from the central section towards the ends.

5

18. Bicycle wheel hub according to claim 1, wherein said tubular body has a central part of constant section, end parts with constant section, but larger than the central one and intermediate parts with 10 increasing sections.

19. Bicycle wheel hub according to claim 1, wherein said structural fibres are selected among carbon fibres, glass fibres, Kevlar fibres, or any 15 combinations thereof.

20. Bicycle wheel hub according to claim 1, wherein the hub body has a shape which is symmetrical relative to an intermediate plane orthogonal to the hub 20 axis.

21. Bicycle wheel hub according to claim 1, wherein the hub body has a shape which is asymmetrical relative to an intermediate plane orthogonal to the hub 25 axis.

22. Bicycle wheel hub according to claim 1, wherein the hub body has a flange in proximity of one of its ends.

30

23. Bicycle wheel hub according to claim 22, wherein the hub body has a flange in proximity of each of its ends.

35

24. Bicycle wheel hub according to claim 22 or

23, wherein said flange has an annular shape.

25. Bicycle wheel hub according to claim 22 or
23, wherein said flange is cross-shaped.

5

26. Bicycle wheel hub, having a tubular body made of a plurality of layers of structural fibre fabric incorporated in a plastic material matrix, said layers including one or more fabric strips wrapped around at 10 least one axially limited portion of the hub body as well as a plurality of fabric plies extending along the hub axis, wherein at least some of said strips and at least some of said plies are alternated to each other.

15 27. Bicycle wheel hub, having a tubular body made of a plurality of layers of structural fibre fabric incorporated in a plastic material matrix, said layers including one or more fabric strips wrapped around at least one axially limited portion of the hub body as 20 well as a plurality of fabric plies extending along the hub axis, wherein at least some of said strips have cuttings on at least one lateral edge thereof.

28. Bicycle wheel hub, having a tubular body made 25 of a plurality of layers of structural fibre fabric incorporated in a plastic material matrix, said layers including one or more fabric strips wrapped around at least one axially limited portion of the hub body as well as a plurality of fabric plies extending along the 30 hub axis, wherein at least some of said strips have a combination of cuttings and extensions on at least one lateral edge thereof.

35 29. Bicycle wheel hub, having a tubular body made of a plurality of layers of structural fibre fabric

incorporated in a plastic material matrix, said layers including one or more fabric strips wrapped around at least one axially limited portion of the hub body as well as a plurality of fabric plies extending along the 5 hub axis, wherein said structural fibres are selected among carbon fibres, glass fibres, Kevlar fibres, or any combinations thereof.